



DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648-XD107]

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Site Characterization Surveys Offshore from Massachusetts to New Jersey for Vineyard Northeast, LLC

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; issuance of an incidental harassment authorization.

SUMMARY: In accordance with the regulations implementing the Marine Mammal Protection Act (MMPA) as amended, notification is hereby given that NMFS has issued an incidental harassment authorization (IHA) to Vineyard Northeast, LLC (Vineyard Northeast) to incidentally harass, by Level B harassment only, marine mammals during marine site characterization surveys offshore from Massachusetts to New Jersey.

DATES: This Authorization is effective for 1 year from date of issuance.

ADDRESSES: Electronic copies of the original application and supporting documents (including NMFS **Federal Register** notices of the original proposed and final authorizations, and the previous IHA), as well as a list of the references cited in this document, may be obtained online at: <https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-other-energy-activities-renewable>. In case of problems accessing these documents, please call the contact listed below.

FOR FURTHER INFORMATION CONTACT: Jessica Taylor, Office of Protected Resources, NMFS, (301) 427-8401.

SUPPLEMENTARY INFORMATION:

Background

The MMPA prohibits the “take” of marine mammals, with certain exceptions. Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce (as delegated to NMFS) to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed incidental take authorization may be provided to the public for review.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for taking for subsistence uses (where relevant). Further, NMFS must prescribe the permissible methods of taking and other “means of effecting the least practicable adverse impact” on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stocks for taking for certain subsistence uses (referred to in shorthand as “mitigation”); and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth.

The definitions of all applicable MMPA statutory terms cited above are included in the relevant sections below.

History of Request

On December 17, 2021, NMFS received a request from Vineyard Northeast for an IHA to take marine mammals incidental to high-resolution geophysical (HRG) marine site characterization surveys offshore from Massachusetts to New Jersey, in the area of Commercial Lease of Submerged Lands for Renewable Energy Development on the Outer Continental Shelf Lease Areas OCS-A 0522 and OCS-A 0544 (Lease Areas) and

potential offshore export cable corridor (OECC) routes to landfall locations. Vineyard Northeast requested authorization to take small numbers of 19 species (comprising 20 stocks) of marine mammals by Level B harassment only. NMFS published a notice of the proposed IHA in the **Federal Register** on May 20, 2022 (87 FR 30872). After a 30-day public comment period and consideration of all public comments received, we subsequently issued the 2022 IHA, which was effective from July 27, 2022, to July 26, 2023 (87 FR 52913, August 30, 2022).

Vineyard Northeast completed a subset of the survey work under the 2022 IHA and submitted a preliminary monitoring report, which demonstrates that they conducted the required marine mammal mitigation and monitoring, and did not exceed the authorized levels of take under the previous IHA issued for surveys offshore from Massachusetts to New Jersey (See 87 FR 52913, August 30, 2022). These monitoring results are available to the public on our website:

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-other-energy-activities-renewable>.

On April 17, 2023, NMFS received a request from Vineyard Northeast for an IHA to take marine mammals incidental to HRG marine site characterization surveys offshore from Massachusetts to New Jersey in the areas of Bureau of Ocean Energy Management (BOEM) Commercial Lease of Submerged Lands for Renewable Energy Development on the OCS-A 0522 (Lease Area), OCS-A 0544 (Lease Area), and associated OECC routes. Following NMFS' review of the application, Vineyard Northeast submitted a revised request on May 25, 2023. The application (the 2023 request) was deemed adequate and complete on May 25, 2023. Vineyard Northeast's request is for take of 19 species (comprising 20 stocks) of marine mammals, by Level B harassment only. Neither Vineyard Northeast nor NMFS expect serious injury or mortality to result from this activity and, therefore, an IHA is appropriate.

The activities described in Vineyard Northeast's request and the acoustic sources authorized for use are identical to what was previously analyzed in support of the IHA issued by NMFS to Vineyard Northeast for 2022 site characterization surveys (2022 IHA) (87 FR 30872, May 20, 2022; 87 FR 52913, August 30, 2022), although the survey duration and project area will be a subset of the survey effort authorized for the 2022 IHA as a portion of this effort has been completed. All mitigation, monitoring, and reporting requirements remain the same. While Vineyard Northeast's activity would have qualified for renewal of the 2022 IHA, due to the availability of updated marine mammal density data (<https://seamap.env.duke.edu/models/Duke/EC/>), which NMFS has determined represents the best available scientific data, NMFS determined to proceed with a new IHA process rather than a renewal, providing a 30-day period for the public to comment on the proposed action.

The 2023 request is nearly identical to the 2022 IHA, with the exception that the survey effort is a subset of the original effort authorized for the 2022 IHA. In evaluating the 2023 request and to the extent deemed appropriate, NMFS also relied on the information presented in notices associated with issuance of the 2022 IHA (87 FR 30872, May 30 2022; 87 FR 52913, August 30, 2022).

No changes were made from the proposed to the final IHA.

Description of the Activity and Anticipated Impacts

Overview

Vineyard Northeast will conduct HRG marine site characterization surveys in the BOEM Lease Areas OCS-A 0522 and 0544 and along potential submarine OECC's from southern Massachusetts to southern New Jersey. The purpose of the surveys is to obtain an assessment of seabed (geophysical, geotechnical, and geohazard), ecological, and archeological conditions within the footprint of the planned offshore wind facility development area. Surveys are also conducted to inform and support engineering design

and to map unexploded ordnance. Survey equipment will be deployed from multiple vessels during site characterization activities in the project area, and up to two vessels will operate at a time in the lease areas and along the OECCs. During survey effort, the vessel will operate at a maximum speed of 4 knots (4.6 miles or 7.4 kilometers (km) per hour). Underwater sound, resulting from Vineyard Northeast's activities, has the potential to result in incidental take of marine mammals in the form of Level B harassment.

The planned activity is estimated to require 467 survey days (37,360 km of trackline) using a maximum of four concurrently operating survey vessels, and is expected to be carried out over the course of the 1-year period beginning from the date of issuance of this IHA.

Underwater sound resulting from Vineyard Northeast's survey activities during use of specific active acoustic sources has the potential to result in incidental take of marine mammals in the form of behavioral harassment (Level B harassment).

Geophysical activities were discussed previously for the 2022 IHA NMFS issued to Vineyard Northeast (87 FR 52913, August 30, 2022) and, as no new information has been presented that changed our determinations on these activities, this information will not be reiterated here. The mitigation, monitoring, and reporting measures are described in more detail later in this document (please see **Description of Mitigation, Monitoring, and Reporting**).

A detailed description of Vineyard Northeast's planned surveys is provided in the **Federal Register** notice of the proposed IHA (88 FR 40212, June 21, 2023) and the 2022 **Federal Register** notice (87 FR 30872, May 30 2022; 87 FR 52913, August 30, 2022). Since that time, no changes have been made to the survey activities. Therefore, a detailed description is not provided here. Please refer to those **Federal Register** notices for the description of the specified activities.

Comments and Responses

A notice of NMFS' proposal to issue an IHA to Vineyard Northeast was published in the **Federal Register** on June 21, 2023 (88 FR 40212). That notice described, in detail, Vineyard Northeast's proposed activities, the marine mammal species that may be affected by these activities, and the anticipated effects on marine mammals. We requested public input on the request for authorization described therein, our analyses, the proposed authorization, and requested that interested persons submit relevant information, suggestions, and comments.

NMFS received 39 public comment letters. Three of these comment letters were from non-governmental organizations: Oceana, Clean Ocean Action (COA), and Sea Life Conservation (SLC). The remaining 36 comment letters were from private citizens. The majority of these expressed general opposition to issuance of the IHA or to the underlying associated activities, but without providing specific information relevant to NMFS' request for public comment. Three of the letters from private citizens provided substantive comments that are addressed below.

We reiterate here that NMFS' action concerns only the authorization of marine mammal take incidental to the planned surveys—NMFS' authority under the MMPA does not extend to the surveys themselves or to wind energy development more generally. Many of the comments requested that NMFS not issue any IHAs related to wind energy development and/or expressed opposition for wind energy development generally without providing information relevant to NMFS' decision to authorize take incidental to Vineyard Northeast's survey activities. We do not specifically address comments expressing general opposition to activities related to wind energy development or respond to comments not relevant to the scope of the proposed IHA (88 FR 40212, June 21, 2023), such as comments on other Federal agency processes and activities not authorized under this IHA (*e.g.*, seismic surveys, offshore wind construction, installation of wind turbines, other marine site characterization surveys).

All substantive comments and NMFS' responses are provided below, and all substantive comments are available on NMFS' website:

<https://www.fisheries.noaa.gov/permit/incidental-take-authorizations-under-marine-mammal-protection-act>. Please see the comment letters for full details regarding the comments and associated rationale.

Comment 1: COA states that BOEM has no legal authority for permitting offshore geotechnical and geophysical survey activities, based on text from the proposed BOEM Renewable Energy Modernization proposed rule (88 FR 5968, January 30, 2023; 88 FR 19578, April 3, 2023). They further state that this has allowed for no oversight with regards to surveys off New Jersey and New York and that they do not understand how BOEM can make assertions without regulations/guidance for HRG survey work.

Response: NMFS' statutory authority for this particular action is limited to authorizing incidental take of marine mammals. NMFS respectfully refers the commenter to BOEM, the agency with responsibility for managing development of U.S. Outer Continental Shelf energy and mineral resources in an environmentally and economically responsible way.

Comment 2: COA expressed concerns with the high amount of increased vessel traffic associated with the offshore wind projects in the two lease areas transited or utilized by certain protected resources, as well as concern for vessel noise.

Response: Vineyard Northeast did not request authorization for take incidental to vessel traffic during their marine site characterization survey. Nevertheless, NMFS analyzed the potential for vessel strikes to occur during the survey, and determined that the potential for vessel strike is so low as to be discountable. NMFS does not authorize any take of marine mammals incidental to vessel strike resulting from the survey. If Vineyard Northeast were to strike a marine mammal with a vessel, this would be an unauthorized take in violation of the MMPA. This gives Vineyard Northeast a strong

incentive to operate its vessels with all due caution and to effectively implement the suite of vessel strike avoidance measures required by the IHA. Vineyard Northeast proposed a very conservative suite of mitigation measures related to vessel strike avoidance, including measures specifically designed to avoid impacts to North Atlantic right whale (NARWs). Section 4(f) in the IHA contains a suite of non-discretionary requirements pertaining to vessel strike avoidance, including vessel operation protocols and monitoring. To date, NMFS is not aware of any site characterization vessel from surveys reporting a vessel strike within the United States. When considered in the context of low overall probability of any vessel strike by Vineyard Northeast vessels, given the limited additional survey-related vessel traffic relative to existing traffic in the survey area, the comprehensive visual monitoring, and other additional mitigation measures described herein, NMFS believes these measures are sufficiently protective to avoid vessel strike. These measures are described fully in the **Description of Mitigation, Monitoring, and Reporting** section below, and include, but are not limited to: training for all vessel observers and captains, daily monitoring of NARW Sighting Advisory System, WhaleAlert app, and USCG Channel 16 for situational awareness regarding NARW presence in the survey area, communication protocols if whales are observed by any Vineyard Northeast personnel, vessel operational protocol should any marine mammal be observed, and visual monitoring.

The potential for impacts related to an overall increase in the amount of vessel traffic due to offshore wind development is separate from the aforementioned analysis of potential for vessel strike during Vineyard Northeast's specified survey activities. For more information, please see the response to comment 5 discussing cumulative impacts.

Comment 3: Oceana and COA stated that NMFS must utilize the best available science and suggested that NMFS has not done so, specifically referencing information regarding the NARW such as updated population estimates, habitat usage in the survey

area, and seasonality information. Oceana and COA specifically assert that NMFS is not using the best available science with regards to the NARW population estimate.

Response: NMFS agrees that the best available science must be used in determining whether a request for incidental take of marine mammals will have a negligible impact on species or stocks of marine mammals and, where appropriate, will not have an unmitigable adverse impact on the availability of such species or stock for subsistence uses. NMFS considered all relevant information regarding NARW abundance estimates, including the commenter's cited information, and determined that the abundance estimate (338; 95 percent with a confidence interval of 325-350) included in the 2022 draft Stock Assessment Reports (SARs; <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports>)), is the best available NARW abundance estimate (88 FR 32735, May 22, 2023).

NMFS also considered the best available science regarding both recent habitat usage patterns for the study area and up-to-date seasonality information in the notice of the proposed IHA, including consideration of existing Biologically Important Areas (BIAs) and densities provided by Roberts *et al.* (2023). While the commenter suggested that NMFS consider best available information for recent habitat usage patterns and seasonality, they did not offer any additional information for NMFS to consider in place of what NMFS considered the best available science in its notice of proposed IHA (88 FR 40212, June 21, 2023).

Comment 4: Oceana noted that chronic stressors are an emerging concern for NARW conservation and recovery and stated that chronic stress may result in energetic effects for NARW. Oceana suggested that NMFS has not fully considered both the use of the area and the effects of both acute and chronic stressors on the health and fitness of NARW, as disturbance responses in NARW could lead to chronic stress or habitat

displacement, leading to an overall decline in their health and fitness.

Response: NMFS agrees with Oceana that both acute and chronic stressors are of concern for NARW conservation and recovery. We recognize that acute stress from acoustic exposure is one potential impact of these surveys, and that chronic stress can have fitness and reproductive impacts at the population-level scale. NMFS has carefully reviewed the best available scientific information in assessing impacts to marine mammals and recognizes that the surveys have the potential to impact marine mammals through behavioral effects, stress responses, and auditory masking. However, NMFS does not expect that the generally short-term, intermittent, and transitory marine site characterization survey activities planned by Vineyard Northeast will create conditions of acute or chronic acoustic exposure leading to long-term physiological stress responses in marine mammals. NMFS has also prescribed a robust suite of mitigation measures, including extended distance shutdowns for NARW, that are expected to further reduce the duration and intensity of acoustic exposure while limiting the potential severity of any possible behavioral disruption. The potential for chronic stress was evaluated in making the determinations presented in NMFS' negligible impact analyses. NARW generally use this location in a transitory manner, specifically for migration, and any potential impacts from these surveys are lessened for other behaviors due to the brief periods where exposure is possible. In context of these expected low-level impacts, which are not expected to meaningfully affect important behavior, we refer to the large size of the migratory corridor (269,488 km²) compared with the approximately 33,814 km² survey area. Thus, the transitory nature of NARW at this location means it is unlikely for any exposure to cause chronic effects, as Vineyard Northeast's planned survey area and ensonified zones are much smaller than the overall migratory corridor. As such, NMFS does not expect acute or cumulative stress to be a detrimental factor to NARW from Vineyard Northeast's described survey activities.

Comment 5: Several commenters asserted that NMFS must deny all actions until the cumulative impacts of every incidental take authorization on marine mammals are considered. Oceana and COA asserted that NMFS must fully consider the discrete effects of each activity and the cumulative effects of the suite of approved, proposed, and potential offshore wind activities on marine mammals and NARW, in particular, and ensure that the cumulative effects are not excessive before issuing or renewing an IHA.

Response: NMFS is required to authorize the requested incidental take if it finds the incidental take by harassment of small numbers of marine mammals by U.S. citizens “while engaging in that [specified] activity” within a specified geographic region will have a negligible impact on such species or stock and where appropriate, will not have an unmitigable adverse impact on the availability of such species or stock for subsistence uses. 16 U.S.C. 1371(a)(5)(D). Negligible impact is defined as “an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival” (50 CFR 216.103). Neither the MMPA nor NMFS’ implementing regulations require consideration of other unrelated activities and their impacts on marine mammal populations in the negligible impact determination. Additionally, NMFS’ implementing regulations require applicants to include in their request a detailed description of the specified activity or class of activities that can be expected to result in incidental taking of marine mammals (50 CFR 216.104(a)(1)). Thus, the “specified activity” for which incidental take coverage is being sought under Section 101(a)(5)(D) is generally defined and described by the applicant. Consistent with the preamble of NMFS’ implementing regulations (54 FR 40338, September 29, 1989), the impacts from other past and ongoing anthropogenic activities are factored into the baseline, which is used in the negligible impact analysis. Here, NMFS has factored into its negligible impact analysis the impacts of other past and ongoing anthropogenic activities via their impacts on the baseline (*e.g.*,

as reflected in the density, distribution and status of the species, population size and growth rate, and other relevant stressors).

The preamble of NMFS' implementing regulations (54 FR 40338, September 29, 1989) also addresses cumulative effects from future, unrelated activities. Such effects are not considered in making the negligible impact determination under MMPA Section 101(a)(5). NMFS considers 1) cumulative effects that are reasonably foreseeable when preparing a National Environmental Policy Act (NEPA) analysis, and (2) reasonably foreseeable cumulative effects under section 7 of the Endangered Species Act (ESA) for ESA-listed species, as appropriate. Accordingly, NMFS has written Environmental Assessments (EA) that addressed cumulative impacts related to substantially similar activities in similar locations (*e.g.*, the 2019 Avangrid EA for survey activities offshore North Carolina and Virginia; the 2017 Ocean Wind, LLC EA for site characterization surveys off New Jersey; and the 2018 Deepwater Wind EA for survey activities offshore Delaware, Massachusetts, and Rhode Island). Cumulative impacts regarding issuance of IHAs for site characterization survey activities such as those planned by Vineyard Northeast have been adequately addressed under NEPA in prior environmental analyses that support NMFS' determination that this action is appropriately categorically excluded from further NEPA analysis. NMFS independently evaluated the use of a categorical exclusion (CE) for issuance of Vineyard Northeast's IHA, which included consideration of extraordinary circumstances.

Separately, the cumulative effects of substantially similar activities in the northwest Atlantic Ocean have been analyzed in the past under section 7 of the ESA when NMFS has engaged in formal intra-agency consultation, such as the 2013 programmatic Biological Opinion for BOEM Lease and Site Assessment Rhode Island, Massachusetts, New York, and New Jersey Wind Energy Areas (<https://repository.library.noaa.gov/view/noaa/29291>). Analyzed activities include those

for which NMFS issued previous IHAs (82 FR 31562, July 7, 2017; 83 FR 28808, June 21, 2018; 83 FR 36539, July 30, 2018; and 86 FR 26465, May 10, 2021), which are similar to those planned by Vineyard Northeast under this current IHA request. This Biological Opinion (BiOp) determined that NMFS' issuance of IHAs for site characterization survey activities associated with leasing, individually and cumulatively, are not likely to adversely affect listed marine mammals. NMFS notes that, while issuance of this IHA is covered under a different consultation, this BiOp remains valid.

Comment 6: COA is concerned regarding the number of species that could be impacted by the activities, as well as a lack of baseline data available for species in the area, specifically for harbor seals.

Response: We appreciate the concern expressed by COA. NMFS utilizes the best available science when analyzing which species may be impacted by an applicant's proposed activities. Based on information found in the scientific literature, as well as based on density models developed by Duke University, all marine mammal species included in the proposed **Federal Register** Notice have some likelihood of occurring in Vineyard Northeast's survey areas. Furthermore, the MMPA requires us to evaluate the effects of the specified activities in consideration of the best scientific evidence available and, if the necessary findings are made, to issue the requested take authorization. The MMPA does not allow us to delay decision making in hopes that additional information may become available in the future.

Regarding the lack of baseline information cited by COA, with specific concern pointed out for harbor seals, NMFS points to two sources of information for marine mammal baseline information: the Ocean/Wind Power Ecological Baseline Studies, January 2008 - December 2009 completed by the New Jersey Department of Environmental Protection in July 2010 (<https://dspace.njstatelib.org/xmlui/handle/10929/68435>) and the Atlantic Marine

Assessment Program for Protected Species (AMAPPS; <https://www.fisheries.noaa.gov/new-england-mid-atlantic/population-assessments/atlantic-marine-assessment-program-protected>) with annual reports available from 2010 to 2020 (<https://www.fisheries.noaa.gov/resource/publication-database/atlantic-marine-assessment-program-protected-species>) that cover the areas across the Atlantic Ocean. NMFS has duly considered this and all available information.

Based on the information presented, NMFS has determined that no new information has become available, nor do the commenters present additional information, that would change our determinations since the publication of the proposed notice.

Comment 7: Several commenters expressed concern that the proposed IHA and its associated specified activities would lead to mortality (death) of marine mammals.

Response: NMFS emphasizes that there is no credible scientific evidence available suggesting that mortality and/or serious injury is a potential outcome of the planned survey activity. Additionally, NMFS cannot authorize mortality or serious injury via an IHA, and such taking is prohibited under Condition 3(c) of the IHA and may result in modification, suspension, or revocation of the IHA. NMFS notes there has never been a report of any serious injuries or mortalities of a marine mammal associated with site characterization surveys. The best available science indicates that Level B harassment, or disruption of behavioral patterns, may occur as a result of Vineyard Northeast's specified activities. We also refer to the Greater Atlantic Regional Fisheries Office (GARFO) 2021 Programmatic Consultation, which finds that these survey activities are in general not likely to adversely affect marine mammal species listed under the ESA (*i.e.*, GARFO's analysis conducted pursuant to the ESA finds that marine mammals are not likely to be taken at all (as that term is defined under the ESA), much less be taken by serious injury or mortality). That document is found at <https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-take-reporting-programmatics-greater->

atlantic#offshore-wind-site-assessment-and-site-characterization-activities-programmatic-consultation.

Comment 8: Oceana states that NMFS must make an assessment of which activities, technologies and strategies are truly necessary to achieve site characterization to inform development of the offshore wind projects and which are not critical, asserting that NMFS should prescribe the appropriate survey techniques. In general, Oceana stated that NMFS must require the IHA applicant to avoid adverse effects on NARWs in and around the survey site, and then minimize and mitigate the impacts of underwater noise to the fullest extent feasible, including through the use of best available technology and methods to minimize sound levels from geophysical surveys such as through the use of technically and commercially feasible and effective noise reduction and attenuation measures.

Response: The MMPA requires that an IHA include measures that will effect the least practicable adverse impact on the affected species and stocks and, in practice, NMFS agrees that the IHA should include conditions for the survey activities that will first avoid adverse effects on NARWs in and around the survey site, where practicable, and then minimize the effects that cannot be avoided. NMFS has determined that the IHA meets this requirement to effect the least practicable adverse impact. As part of the analysis for all marine site characterization survey IHAs, NMFS evaluated the effects expected as a result of the specified activity, made the necessary findings, and prescribed mitigation requirements sufficient to achieve the least practicable adverse impact on the affected species and stocks of marine mammals. It is not within NMFS' purview to set the activities, technologies, and strategies that applicants may employ to meet their objectives. As explained above, the "specified activity" for which incidental take coverage is being sought under section 101(a)(5)(D) is generally defined and described by the applicant, not by NMFS.

Comment 9: Oceana suggests that NMFS require the use of Protected Species Observers (PSOs) and that PSOs complement their survey efforts using additional technologies, such as infrared detection devices when in low-light conditions.

Response: NMFS agrees with Oceana regarding these suggestions and requirements to utilize PSOs for monitoring and for PSOs to use a thermal (infrared) device during low-light conditions were included in the proposed **Federal Register** Notice. That requirement is included in the issued IHA.

Comment 10: Oceana recommended that NMFS restrict all vessels of all sizes associated with the proposed survey activities to speeds less than 10 knots (kn) (18.5 kilometers (km)/hour) at all times due to the risk of vessel strikes to NARWs and other large whales.

Response: While NMFS acknowledges that vessel strikes can result in injury or mortality, we have analyzed the potential for vessel strike resulting from Vineyard Northeast's activity and have determined that based on the nature of the activity and the required mitigation measures specific to vessel strike avoidance included in the IHA, potential for vessel strike is so low as to be discountable. The required mitigation measures, all of which were included in the proposed IHA and are now required in the final IHA, include: A requirement that all vessel operators comply with 10 kn (18.5 km/hour) or less speed restrictions in any Seasonal Management Area (SMA), Dynamic Management Area (DMA), or Slow Zone while underway, and check daily for information regarding the establishment of mandatory or voluntary vessel strike avoidance areas (SMAs, DMAs, Slow Zones) and information regarding NARW sighting locations; a requirement that all vessels greater than or equal to 19.8 meters (m) in overall length operating from November 1 through April 30 operate at speeds of 10 kn (18.5 km/hour) or less; a requirement that all vessel operators reduce vessel speed to 10 kn (18.5 km/hour) or less when any large whale, any mother/calf pairs, pods, or large

assemblages of non-delphinid cetaceans are observed near the vessel; a requirement that all survey vessels maintain a separation distance of 500 m or greater from any ESA-listed whales or other unidentified large marine mammals visible at the surface while underway; a requirement that, if underway, vessels must steer a course away from any sighted ESA-listed whale at 10 kn (18.5 km/hour) or less until the 500 m minimum separation distance has been established; a requirement that, if an ESA-listed whale is sighted in a vessel's path, or within 500 m of an underway vessel, the underway vessel must reduce speed and shift the engine to neutral; a requirement that all vessels underway must maintain a minimum separation distance of 100 m from all non-ESA-listed baleen whales; and a requirement that all vessels underway must, to the maximum extent practicable, attempt to maintain a minimum separation distance of 50 m from all other marine mammals, with an understanding that at times this may not be possible (*e.g.*, for animals that approach the vessel). We have determined that the vessel strike avoidance measures in the IHA are sufficient to ensure the least practicable adverse impact on species or stocks and their habitat. Furthermore, no documented vessel strikes have occurred for any marine site characterization surveys which were issued IHAs from NMFS during the survey activities themselves or while transiting to and from survey sites.

Comment 11: Oceana suggests that NMFS require vessels maintain a separation distance of at least 500 m from NARWs at all times.

Response: NMFS agrees with Oceana regarding this suggestion and a requirement to maintain a separation distance of at least 500 m from NARWs at all times was included in the proposed Federal Register Notice and was included as a requirement in the issued IHA.

Comment 12: Oceana recommended that the IHA should require all vessels supporting site characterization to be equipped with and using Class A Automatic

Identification System (AIS) devices at all times while on the water. Oceana suggested this requirement should apply to all vessels, regardless of size, associated with the survey.

Response: NMFS is generally supportive of the idea that vessels involved with survey activities be equipped with and using Class A Automatic Identification System (devices) at all times while on the water. Indeed, there is a precedent for NMFS requiring such a stipulation for geophysical surveys in the Atlantic Ocean (38 FR 63268, December 7, 2018); however, these activities carried the potential for much more significant impacts than the marine site characterization surveys to be carried out by Vineyard Northeast, with the potential for both Level A and Level B harassment take. Given the small isopleths and small numbers of take authorized by this IHA, NMFS does not agree that the benefits of requiring AIS on all vessels associated with the survey activities outweighs and warrants the cost and practicability issues associated with this requirement and therefore the agency has not included this within the issued IHA.

Comment 13: Oceana asserts that the IHA must include requirements to hold all vessels associated with site characterization surveys accountable to the IHA requirements, including vessels owned by the developer, contractors, employees, and others regardless of ownership, operator, and contract. They state that exceptions and exemptions will create enforcement uncertainty and incentives to evade regulations through reclassification and redesignation. They recommend that NMFS simplify this by requiring all vessels to abide by the same requirements, regardless of size, ownership, function, contract or other specifics.

Response: NMFS agrees with Oceana and required these measures in the proposed IHA and final IHA. The IHA requires that a copy of the IHA must be in the possession of Vineyard Northeast, the vessel operators, the lead PSO, and any other relevant designees of Vineyard Northeast operating under the authority of this IHA. The IHA also states that Vineyard Northeast must ensure that the vessel operator and other

relevant vessel personnel, including the PSO team, are briefed on all responsibilities, communication procedures, marine mammal monitoring protocols, operational procedures, and IHA requirements prior to the start of survey activity, and when relevant new personnel join the survey operations.

Comment 14: Oceana stated that the IHA must include a requirement for all phases of the site characterization to subscribe to the highest level of transparency, including frequent reporting to Federal agencies. Oceana recommended requirements to report all visual and acoustic detections of NARWs and any dead, injured, or entangled marine mammals to NMFS or the Coast Guard as soon as possible and no later than the end of the PSO shift. Oceana states that to foster stakeholder relationships and allow public engagement and oversight of the permitting, the IHA should require all reports and data to be accessible on a publicly available website.

Response: NMFS agrees with the need for reporting and indeed, the MMPA calls for IHAs to incorporate reporting requirements. As included in the proposed IHA, the final IHA includes requirements for reporting that supports Oceana's recommendations. Vineyard Northeast is required to submit a monitoring report to NMFS within 90 days after completion of survey activities that fully documents the methods and monitoring protocols, summarizes the data recorded during monitoring. PSO datasheets or raw sightings data must also be provided with the draft and final monitoring report.

Further, the draft IHA and final IHA stipulate that if a NARW is observed at any time by any survey vessels, during surveys or during vessel transit, Vineyard Northeast must immediately report sighting information to the NMFS NARW Sighting Advisory System within 2 hours of occurrence, when practicable, or no later than 24 hours after occurrence. Vineyard Northeast may also report the sighting to the U.S. Coast Guard. Additionally, Vineyard Northeast must report any discoveries of injured or dead marine mammals to the Office of Protected Resources, NMFS, and to the New England/Mid-

Atlantic Regional Stranding Coordinator as soon as feasible. This includes entangled animals. All reports and associated data submitted to NMFS are included on the website for public inspection.

Daily visual and acoustic detections of NARWs and other large whale species along the Eastern Seaboard, as well as Slow Zone locations, are publicly available on WhaleMap (<https://whalemap.org/WhaleMap/>). Further, recent acoustic detections of NARWs and other large whale species are available to the public on NOAA's Passive Acoustic Cetacean Map website <https://apps-nefsc.fisheries.noaa.gov/pacm/#/narw>.

Comment 15: Oceana recommends a shutdown requirement if a NARW or other ESA-listed species is detected in the clearance zone as well as a publicly available explanation of any exemptions allowing the applicant not to shut down in these situations.

Response: NMFS reiterates that use of the planned sources is not expected to have any potential to cause injury of any species, including NARW, even in the absence of mitigation. Consideration of the anticipated effectiveness of the mitigation measures (*i.e.*, clearance zones and shutdown measures) discussed below and in the **Mitigation** section of this notice further strengthens the conclusion that injury is not a reasonably anticipated outcome of the survey activity. Nevertheless, there are several shutdown requirements described in the **Federal Register** notice of the proposed IHA (88 FR 40212, June 21, 2023), and which are included in the final IHA, including the stipulation that geophysical survey equipment must be immediately shut down if any marine mammal is observed within or entering the relevant Clearance Zone while geophysical survey equipment is operational. There is no exemption for the shutdown requirement for NARW and ESA-listed species.

Vineyard Northeast is required to implement a 30-minute pre-start clearance period prior to the initiation of ramp-up of specified HRG equipment. During this period,

clearance zones will be monitored by the PSOs using the appropriate visual technology. Ramp-up may not be initiated if any marine mammal(s) is within its respective clearance zone. If a marine mammal is observed within a clearance zone during the pre-start clearance period, ramp-up may not begin until the animal(s) has been observed exiting its respective exclusion zone or until an additional time period has elapsed with no further sighting (*i.e.*, 15 minutes for small odontocetes and seals, and 30 minutes for all other species). If the acoustic source is shut down for reasons other than mitigation (*e.g.*, mechanical difficulty) for less than 30 minutes, it may be activated again without ramp-up if PSOs have maintained constant observation and no detections of any marine mammal have occurred within the respective clearance zones.

In regards to reporting, Vineyard Northeast must notify NMFS if a NARW is observed at any time by any survey vessels during surveys or during vessel transit. Additionally, Vineyard Northeast is required to report the relevant survey activity information, such as the type of survey equipment in operation, acoustic source power output while in operation, and any other notes of significance (*i.e.*, pre-clearance survey, ramp-up, shutdown, end of operations, *etc.*) as well as the estimated distance to an animal and its heading relative to the survey vessel at the initial sighting and survey activity information. We note that if a NARW is detected within the Clearance Zone before a shutdown is implemented, the NARW and its distance from the sound source, including if it is within the Level B harassment zone, would be reported in Vineyard Northeast's final monitoring report and made publicly available on NMFS' website. Vineyard Northeast is required to immediately notify NMFS of any sightings of NARWs and report upon survey activity information. NMFS believes that these requirements address the commenter's concerns.

NMFS does not require acoustic monitoring for the reasons stated in our response to Comment 23.

Comment 16: COA asserts that Level A harassment may occur, and that this was not accounted for in the proposed Notice.

Response: NMFS acknowledges the concerns brought up regarding the potential for Level A harassment of marine mammals. However, no Level A harassment is expected to result, even in the absence of mitigation, given the characteristics of the sources planned for use. This is additionally supported by the required mitigation, which further reduces the unlikely potential for any Level A harassment to occur, and very small estimated Level A harassment zones described in Vineyard Northeast's 2022 **Federal Register** notice (87 FR 52913, August 30, 2022) and carried through to the 2023 IHA (88 FR 40212, June 21, 2023). Furthermore, the commenter does not provide any support for the apparent contention that Level A harassment is a potential outcome of these activities.

As discussed in the notice of proposed IHA, NMFS considers this category of survey operations to be near *de minimis*, with the potential for Level A harassment for any species to be discountable.

Comment 17: COA expressed concern regarding ocean noise and the interference it has on communication between whales.

Response: NMFS has carefully reviewed the best available scientific information in assessing impacts to marine mammals and determined that the surveys have the potential to impact marine mammals through behavioral effects and auditory masking. NMFS agrees that noise pollution in marine waters is an issue and is affecting marine mammals, including their ability to communicate when noise reaches certain thresholds. However, NMFS does not expect that the generally short-term, intermittent, and transitory marine site characterization survey activities planned by Vineyard Northeast will create conditions of acute or chronic acoustic exposure leading to long-term physiological impacts in marine mammals. NMFS' prescribed mitigation measures are

expected to further reduce the duration and intensity of acoustic exposure while limiting the potential severity of any possible behavioral disruption.

Comment 18: COA and SLC do not agree with NMFS' small numbers and negligible impact determination for the numbers of marine mammals taken by Level B harassment under Vineyard Northeast's planned activities.

Response: NMFS disagrees with the commenters' arguments on the topic of small numbers and negligible impact findings, and the commenters do not provide a reasoned basis for finding that the effects of the specified activity would be greater than negligible on any species or stock. The Negligible Impact Analysis and Determination section of the proposed and final 2022 IHA (87 FR 30872, 87 FR 52913) provides a detailed qualitative discussion supporting NMFS' determination that any anticipated impacts from this action would be negligible. The section contains a number of factors that were considered by NMFS based on the best available scientific data and why we concluded that impacts resulting from the specified activity are not reasonably expected to, or reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.

Although there is limited legislative history available to guide NMFS and an apparent lack of biological underpinning to the concept, we have worked to develop a reasoned approach to small numbers. NMFS explains the concept of "small numbers" in recognition that there could also be quantities of individuals taken that would correspond with "medium" and "large" numbers. As such, NMFS considers that one-third of the most appropriate population abundance number - as compared with the assumed number of individuals taken - is an appropriate limit with regard to "small numbers." This relative approach is consistent with the statement from the legislative history that "[small numbers] is not capable of being expressed in absolute numerical limits" (H.R. Rep. No. 97-228, at 19 (September 16, 1981)), and relevant case law (*Center for Biological*

Diversity v. Salazar, 695 F.3d 893, 907 (9th Cir. 2012) (holding that the U.S. Fish and Wildlife Service reasonably interpreted “small numbers” by analyzing take in relative or proportional terms)). NMFS has made the necessary small numbers finding for all affected species and stocks in this case.

Comment 19: SLC states its opposition to the use of a categorical exclusion under NEPA.

Response: NMFS does not agree with SLC’s comment. A CE is a category of actions that an agency has determined does not individually or cumulatively have a significant effect on the quality of the human environment, and is appropriately applied for such categories of actions so long as there are no extraordinary circumstances present that would indicate that the effects of the action may be significant. Extraordinary circumstances are situations for which NOAA has determined further NEPA analysis is required because they are circumstances in which a normally excluded action may have significant effects. A determination of whether an action that is normally excluded requires additional evaluation because of extraordinary circumstances focuses on the action’s potential effects and considers the significance of those effects in terms of both context (consideration of the affected region, interests, and resources) and intensity (severity of impacts). Potential extraordinary circumstances relevant to this action include (1) adverse effects on species or habitats protected by the MMPA that are not negligible; (2) highly controversial environmental effects; (3) environmental effects that are uncertain, unique, or unknown; and (4) the potential for significant cumulative impacts when the proposed action is combined with other past, present, and reasonably foreseeable future actions.

The relevant NOAA CE associated with issuance of incidental take authorizations is CE B4, “Issuance of incidental harassment authorizations under Section 101(a)(5)(A) and (D) of the MMPA for the incidental, but not intentional, take by harassment of

marine mammals during specified activities and for which no serious injury or mortality is anticipated.” This action falls within CE B4. In determining whether a CE is appropriate for a given incidental take authorization, NMFS considers the applicant’s specified activity and the potential extent and magnitude of takes of marine mammals associated with that activity along with the extraordinary circumstances listed in the Companion Manual for NOAA Administrative Order (NAO) 216-6A and summarized above. The evaluation of whether extraordinary circumstances (if present) have the potential for significant environmental effects is limited to the decision NMFS is responsible for, which is issuance of the incidental take authorization. While there may be environmental effects associated with the underlying action, potential effects of NMFS’ action are limited to those that would occur due to the authorization of incidental take of marine mammals. NMFS prepared numerous EAs analyzing the environmental impacts of the categories of activities encompassed by CE B4 which resulted in Findings of No Significant Impacts (FONSI)s and, in particular, numerous EAs prepared in support of issuance of IHAs related to similar survey actions are part of NMFS’ administrative record supporting CE B4. These EAs demonstrate the issuance of a given incidental harassment authorization does not affect other aspects of the human environment because the action only affects the marine mammals that are the subject of the incidental harassment authorization. These EAs also addressed factors in 40 CFR 1508.27 regarding the potential for significant impacts and demonstrate the issuance of incidental harassment authorization for the categories of activities encompassed by CE B4 do not individually or cumulatively have a significant effect on the human environment.

Specifically for this action, NMFS independently evaluated the use of the CE for issuance of Vineyard Northeast’s IHA, which included consideration of extraordinary circumstances. As part of that analysis, NMFS considered whether this IHA issuance

would result in cumulative impacts that could be significant. In particular, the issuance of an IHA to Vineyard Northeast is expected to result in minor, short-term behavioral effects on marine mammal species due to exposure to underwater sound from site characterization survey activities. Behavioral disturbance is possible to occur intermittently in the vicinity of Vineyard Northeast's survey area during the 1-year timeframe. Level B harassment will be reduced through use of mitigation measures described herein. Additionally, as discussed elsewhere, NMFS has determined that Vineyard Northeast's activities fall within the scope of activities analyzed in GARFO's programmatic consultation regarding geophysical surveys along the U.S. Atlantic coast in the three Atlantic Renewable Energy Regions (completed June 29, 2021; revised September 2021), which concluded surveys such as those planned by Vineyard Northeast are not likely to adversely affect endangered listed species or adversely modify or destroy critical habitat. Accordingly, NMFS has determined that the issuance of this IHA will result in no more than negligible (as that term is defined by the Companion Manual for NAO 216-6A) adverse effects on species protected by the ESA and the MMPA.

Further, the issuance of this IHA will not result in highly controversial environmental effects or result in environmental effects that are uncertain, unique, or unknown because numerous entities have been engaged in site characterization surveys that result in Level B harassment of marine mammals in the United States. This type of activity is well documented; prior authorizations and analysis demonstrates issuance of an IHA for this type of action only affects the marine mammals that are the subject of the specific authorization and, thus, no potential for significant cumulative impacts are expected, regardless of past, present, or reasonably foreseeable actions, even though the impacts of the action may not be significant by itself. Based on this evaluation, we concluded that the issuance of the IHA qualifies to be categorically excluded from further NEPA review.

Comment 20: SLC asserts that NMFS is permitting the proposed activities without any empirically-determined benchmark for what is the injury-causing sound pressure level (“SPL”) against which to measure the proposed activities. In addition, SLC indicates that basing the shutdown and clearance distances on permanent threshold shift (PTS) thresholds is insufficient as PTS thresholds are modeled from temporary threshold shift (TTS) data and threshold for tissue injury may occur at a lower level than TTS.

Response: NMFS does not agree with the commenter that shutdown and clearance distances based upon PTS thresholds are insufficient due to thresholds being modeled from TTS data. Marine mammal PTS thresholds are appropriately extrapolated from marine mammal TTS data and data from terrestrial mammals, as described in NMFS’ 2018 Technical Guidance. We refer the commenter to that guidance. Further, TTS is not considered injury, as defined for Level A harassment under the MMPA, because it is fully recoverable.

Comment 21: SLC asserts that the spreading models used for assessing noise levels from the proposed activities do not adequately account for sound bouncing off the underside of the water’s surface and other surface reflection.

Response: NMFS does not agree with the commenter regarding the use of spreading models for assessing noise levels. While the transmission loss models used for HRG sources are fairly simplistic and do not directly account for reflections at the surface, the models are designed to account for how sound would propagate through the environment, including accounting for beamwidth and frequency absorption, and thus provide realistic approximations of how sounds from these sources are believed to travel through the environment. Accounting for scattering at the surface is heavily dependent on the roughness of the sea surface, with rougher surfaces resulting in more propagation loss (dB) per bounce as the sound hits the water surface (i.e., this additional dB loss is not accounted for in more simple models). Only flat surfaces would allow for complete

reflection of sound. In addition, most HRG sources are designed to focus sound downwards towards the bottom, thus, accounting for surface reflections associated with these sources is unnecessary.

Comment 22: SLC asserted that the ability for a developer to detect and report whether it has exceeded the levels of take authorized by NMFS is limited as not all marine mammals may be detected and recommended additional reporting requirements.

Response: NMFS reviews required reporting (see **Description of Mitigation, Monitoring, and Reporting**) and uses the information to evaluate the mitigation measure effectiveness. Additionally, the mitigation measures included in Vineyard Northeast's IHA are not unique, and data from prior IHAs support the effectiveness of these mitigation measures. NMFS finds the level of reporting currently required is sufficient for managing the issued IHA and monitoring the affected stocks of marine mammals.

Comment 23: SLC recommended that NMFS should require Passive Acoustic Monitoring (PAM) at all times, both day and night, to maximize the probability of detection for North Atlantic right whales.

Response: NMFS does not agree that a measure to require PAM at all times is warranted, as it is not expected to be effective for use in detecting the species of concern. It is generally accepted that, even in the absence of additional acoustic sources, using a towed passive acoustic sensor to detect baleen whales (including NARWs) is not typically effective because the noise from the vessel, the flow noise, and the cable noise are in the same frequency band and will mask the vast majority of baleen whale calls. Vessels produce low-frequency noise, primarily through propeller cavitation, with main energy in the 5-300 Hertz (Hz) frequency range. Source levels range from about 140 to 195 decibel (dB) re 1 μ Pa (micropascal) at 1 m (NRC, 2003; Hildebrand, 2009), depending on factors such as ship type, load, and speed, and ship hull and propeller

design. Studies of vessel noise show that it appears to increase background noise levels in the 71-224 Hz range by 10-13 dB (Hatch *et al.*, 2012; McKenna *et al.*, 2012; Rolland *et al.*, 2012). PAM systems employ hydrophones towed in streamer cables approximately 500 m behind a vessel. Noise from water flow around the cables and from strumming of the cables themselves is also low-frequency and typically masks signals in the same range. Experienced PAM operators participating in a recent workshop (Thode *et al.*, 2017) emphasized that a PAM operation could easily report no acoustic encounters, depending on species present, simply because background noise levels rendered any acoustic detection impossible. The same workshop report stated that a typical eight-element array towed 500 m behind a vessel could be expected to detect delphinids, sperm whales, and beaked whales at the required range, but not baleen whales, due to expected background noise levels (including seismic noise, vessel noise, and flow noise).

Comment 24: SLC asserts that NMFS' assessment of the potential for, and the impacts of, masking is insufficient.

Response: NMFS disagrees that the potential impacts of masking were not properly considered. NMFS acknowledges our understanding of the scientific literature that SLC cited but, fundamentally, the masking effects to any one individual whale from one survey are expected to be minimal. Masking is referred to as a chronic effect because one of the key harmful components of masking is its duration—the fact that an animal would have reduced ability to hear or interpret critical cues becomes much more likely to cause a problem the longer it is occurring. Also, inherent in the concept of masking is the fact that the potential for the effect is only present during the times that the animal and the source are in close enough proximity for the effect to occur (and further this time period would need to coincide with a time that the animal was utilizing sounds at the masked frequency) and, as our analysis (both quantitative and qualitative components) indicates, because of the relative movement of whales and vessels, we do not expect these

exposures with the potential for masking to be of a long duration within a given day. Further, because of the relatively low density of mysticetes, and relatively large area over which the vessels travel, we do not expect any individual whales to be exposed to potentially masking levels from these surveys for more than a few days in a year.

As noted above, any masking effects of this survey are expected to be limited and brief, if present. Given the likelihood of significantly reduced received levels beyond even short distances from the survey vessel, combined with the short duration of potential masking and the lower likelihood of extensive additional contributors to background noise offshore and within these short exposure periods, we believe that the incremental addition of the survey vessel is unlikely to result in more than minor and short-term masking effects, likely occurring to some small number of the same individuals captured in the estimate of behavioral harassment.

Comment 25: COA and SLC urged NMFS to deny the proposed project and/or postpone any offshore wind activities until NMFS determines effects of all offshore wind-related activities on marine mammals in the region and determines that the recent whale deaths are not related to offshore wind activities. Commenters provided general concerns regarding recent whale stranding events on the Atlantic Coast, including speculation that the strandings may be related to wind energy development activities. In addition, SLC urged NMFS to investigate whether wind energy development activities may have physiological or mortality-inducing effects on whales.

Response: NMFS authorizes take of marine mammals incidental to marine site characterization surveys but does not authorize the surveys themselves. Therefore, while NMFS has the authority to modify, suspend, or revoke an IHA if the IHA holder fails to abide by the conditions prescribed therein (including, but not limited to, failure to comply with monitoring or reporting requirements), or if NMFS determines that (1) the authorized taking is having or is likely to have more than a negligible impact on the

species or stocks of affected marine mammals, or (2) the prescribed measures are likely not or are not effecting the least practicable adverse impact on the affected species or stocks and their habitat, it is not within NMFS' jurisdiction to impose a moratorium on offshore wind development or to require surveys to cease on the basis of unsupported speculation.

NMFS reiterates that there is no evidence that noise resulting from offshore wind development-related site characterization surveys could potentially cause marine mammal stranding, and there is no evidence linking recent large whale mortalities and currently ongoing surveys. The commenters offer no such evidence. NMFS will continue to gather data to help us determine the cause of death for these stranded whales. We note the Marine Mammal Commission's recent statement: "There continues to be no evidence to link these large whale strandings to offshore wind energy development, including no evidence to link them to sound emitted during wind development-related site characterization surveys, known as HRG surveys. Although HRG surveys have been occurring off New England and the mid-Atlantic coast, HRG devices have never been implicated or causatively-associated with baleen whale strandings." (Marine Mammal Commission Newsletter, Spring 2023). Furthermore, NMFS does not expect that the generally short-term, intermittent, and transitory marine site characterization survey activities planned by Vineyard Northeast will create conditions of acute or chronic acoustic exposure leading to long-term physiological impacts in whales.

There is an ongoing Unusual Mortality Event (UME) for humpback whales along the Atlantic coast from Maine to Florida, which includes animals stranded since 2016. Partial or full necropsy examinations were conducted on approximately half of the whales. Necropsies were not conducted on other carcasses because they were too decomposed, not brought to land, or stranded on protected lands (*e.g.*, national and state parks) with limited or no access. Of the whales examined (roughly 90), about 40 percent

had evidence of human interaction, either vessel strike or entanglement. Vessel strikes and entanglement in fishing gear are the greatest human threats to large whales. The remaining 50 necropsied whales either had an undetermined cause of death (due to a limited examination or decomposition of the carcass), or had other causes of death including parasite-caused organ damage and starvation.

As discussed herein, HRG sources may behaviorally disturb marine mammals (e.g., avoidance of the immediate area). These HRG surveys are very different from seismic airguns used in oil and gas surveys or tactical military sonar. They produce much smaller impact zones because, in general, they have lower source levels and produce output at higher frequencies. The area within which HRG sources might behaviorally disturb a marine mammal is orders of magnitude smaller than the impact areas for seismic airguns or military sonar. Any marine mammal exposure would be at significantly lower levels and shorter duration, which is associated with less severe impacts to marine mammals.

Description of Marine Mammals

A description of the marine mammals in the survey area can be found in the previous documents and notices for the 2022 IHA (87 FR 30872, May 20, 2022; 87 FR 52913, August 30, 2022), which remains applicable to this IHA. NMFS reviewed the most recent draft SARs, found on NMFS' website at

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>, up-to-date information on relevant UMEs;

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-unusual-mortality-events>), and recent scientific literature and determined that no new information affects our original analysis of impacts under the 2022 IHA. More general information about these species (e.g., physical and behavioral descriptions) may be found on NMFS's website (*<https://www.fisheries.noaa.gov/find-species>*).

NMFS notes that, since issuance of the 2022 IHA, a new SAR was made available with new information presented for the NARW (see <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports>). We note that the estimated abundance for the species declined from 368 to 338. However, this change does not affect our analysis of impacts, as described under the 2022 IHA.

Marine Mammal Hearing

Hearing is the most important sensory modality for marine mammals underwater, and exposure to anthropogenic sound can have deleterious effects. To appropriately assess the potential effects of exposure to sound, it is necessary to understand the frequency ranges marine mammals are able to hear. Current data indicate that not all marine mammal species have equal hearing capabilities (*e.g.*, Richardson *et al.*, 1995; Wartzok and Ketten, 1999; Au and Hastings, 2008). To reflect this, Southall *et al.* (2007) recommended that marine mammals be divided into functional hearing groups based on directly measured or estimated hearing ranges on the basis of available behavioral response data, audiograms derived using auditory evoked potential techniques, anatomical modeling, and other data. Note that no direct measurements of hearing ability have been successfully completed for mysticetes (*i.e.*, low-frequency cetaceans). Subsequently, NMFS (2018) described generalized hearing ranges for these marine mammal hearing groups. Generalized hearing ranges were chosen based on the approximately 65 dB threshold from the normalized composite audiograms, with the exception for lower limits for low-frequency cetaceans where the lower bound was deemed to be biologically implausible and the lower bound from Southall *et al.* (2007) retained. Marine mammal hearing groups and their associated hearing ranges are provided in Table 1.

Table 1 -- Marine Mammal Hearing Groups (NMFS, 2018)

Hearing Group	Generalized Hearing Range*
Low-frequency (LF) cetaceans (baleen whales)	7 Hz to 35 kHz
Mid-frequency (MF) cetaceans (dolphins, toothed whales, beaked whales, bottlenose whales)	150 Hz to 160 kHz
High-frequency (HF) cetaceans (true porpoises, <i>Kogia</i> , river dolphins, Cephalorhynchid, <i>Lagenorhynchus cruciger</i> & <i>L. australis</i>)	275 Hz to 160 kHz
Phocid pinnipeds (PW) (underwater) (true seals)	50 Hz to 86 kHz
Otariid pinnipeds (OW) (underwater) (sea lions and fur seals)	60 Hz to 39 kHz
* Represents the generalized hearing range for the entire group as a composite (<i>i.e.</i> , all species within the group), where individual species' hearing ranges are typically not as broad. Generalized hearing range chosen based on ~65 dB threshold from normalized composite audiogram, with the exception for lower limits for LF cetaceans (Southall <i>et al.</i> , 2007) and PW pinniped (approximation).	

The pinniped functional hearing group was modified from Southall *et al.* (2007) on the basis of data indicating that phocid species have consistently demonstrated an extended frequency range of hearing compared to otariids, especially in the higher frequency range (Hemilä *et al.*, 2006; Kastelein *et al.*, 2009; Reichmuth and Holt, 2013). For more detail concerning these groups and associated frequency ranges, please see NMFS (2018) for a review of available information.

Nineteen marine mammal species (comprising 20 total stocks; 17 cetacean (18 stocks) and 2 pinniped (both phocid) species) have the reasonable potential to co-occur with the survey activities. Of the cetacean species that may be present, 6 are classified as low-frequency cetaceans (*i.e.*, all mysticete species), 10 are classified as mid-frequency cetaceans (*i.e.*, all delphinid species and the sperm whale), and 1 is classified as a high-frequency cetacean (*i.e.*, harbor porpoise).

Potential Effects on Marine Mammals and Their Habitat

A description of the potential effects of the specified activities on marine mammals and their habitat can be found in the documents supporting the 2022 IHA (87 FR 30872, May 20, 2022; 87 FR 52913, August 30, 2022). At present, there is no new information on potential effects that would influence our analysis.

Estimated Take

A detailed description of the methods used to estimate take anticipated to occur incidental to the project is found in the previous **Federal Register** notices (87 FR 30872, May 20, 2022; 87 FR 52913, August 30, 2022). The methods of estimating take are identical to those used in the 2022 IHA. Vineyard Northeast updated the marine mammal densities based on new information (Roberts *et al.*, 2016; Roberts *et al.*, 2023), available online at: <https://seamap.env.duke.edu/models/Duke/EC/>. We refer the reader to Table 8 in Vineyard Northeast’s 2023 IHA request for the specific density values used in the analysis. The IHA request is available online at:

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-other-energy-activities-renewable>.

The take that NMFS has authorized can be found in Table 2, which presents the results of Vineyard Northeast’s density-based calculations for the survey area. For comparative purposes, we have provided the 2022 IHA authorized Level B harassment take (87 FR 52913, August 30, 2022). NMFS notes that take by Level A harassment was not requested, nor does NMFS anticipate that it could occur. Therefore, NMFS has not authorized any take by Level A harassment. Mortality or serious injury is neither anticipated to occur nor authorized.

Table 2 -- Total Authorized Take, By Level B Harassment Only, Relative to Population Size

Species	Scientific Name	Stock	Abundance	2022 IHA Authorized Take	2023 IHA	
					Authorized Take ¹	Max Percent Population
Blue whale	<i>Balaenoptera musculus</i>	Western North Atlantic	402	1	1	0.25
North Atlantic Right Whale	<i>Eubalaena glacialis</i>	Western North Atlantic	338	40	12	3.6
Humpback Whale	<i>Megaptera novaeangliae</i>	Gulf of Maine	1,396	47	12	0.86

Fin Whale	<i>Balaenoptera physalus</i>	Western North Atlantic	6,802	77	20	0.29
Sei Whale	<i>Balaenoptera borealis</i>	Nova Scotia	6,292	5	5	0.08
Minke whale	<i>Balaenoptera acutorostrata</i>	Canadian Eastern Coastal	21,968	42	46	0.21
Sperm whale	<i>Physeter macrocephalus</i>	North Atlantic	4,349	12	2	0.05
Long-finned pilot whale ¹	<i>Globicephala melas</i>	Western North Atlantic	39,215	405	17	0.04
Killer whale ²	<i>Orcinus orca</i>	Western North Atlantic	UNK	2	4 ³	5.9 ⁴
False killer whale ²	<i>Pseudorca crassidens</i>	Western North Atlantic	1,791	5	5	0.28
Atlantic spotted dolphin ³	<i>Stenella frontalis</i>	Western North Atlantic	39,921	29	29	0.07
Atlantic white-sided dolphin	<i>Lagenorhynchus acutus</i>	Western North Atlantic	93,233	1,124	129	0.14
Bottlenose dolphin	<i>Tursiops truncatus</i>	Western North Atlantic Northern Migratory Coastal	6,639	151	45	0.68
		Western North Atlantic Offshore	62,851	569	169	0.27
Common dolphin	<i>Delphinus delphis</i>	Western North Atlantic	172,974	13,904	7,472	4.3
Risso's dolphin	<i>Grampus griseus</i>	Western North Atlantic	35,215	101	9	0.03
White-beaked dolphin	<i>Lagenorhynchus albirostris</i>	Western North Atlantic	536,016	30	30	0.006
Harbor porpoise	<i>Phocoena phocoena</i>	Gulf of Maine/Bay of Fundy	95,543	2,033	347	0.36
Harbor seal ⁵	<i>Phoca vitulina</i>	Western North Atlantic	61,336	939	939	1.5
Gray seal ⁵	<i>Halichoerus grypus</i>	Western North Atlantic	27,300 ⁶	418	418	1.5

¹ Roberts *et al.* (2023) only provides density estimates for pilot whales as a guild. Given the project's location, NMFS assumes that all take will be of long-finned pilot whales.

² Rare (or unlikely to occur) species.

³ Adjusted according to average group size (Kraus *et al.*, 2016; Palka *et al.*, 2017).

⁴ Based upon minimum population estimate of 67 individual killer whales identified in the Northwestern Atlantic Ocean (Lawson and Stevens, 2014).

⁵ Roberts *et al.* (2023) only provides density estimates for seals without differentiating by species. In order to determine the species-specific density-based exposure estimates for seals, Vineyard Northeast used the following approach. Vineyard Northeast summed the SAR N_{best} abundance estimates (Hayes *et al.*, 2022) for the 2 seal species and divided the total by the estimate for each species to get the proportion of the total for each species. Vineyard Northeast then multiplied these proportions by the total estimated exposure for

the seal guild density (Roberts *et al.*, 2023) to get the species-specific density-based exposure estimates. NMFS accepts this approach.

⁶NMFS' stock abundance estimate (and associated potential biological removal (PBR) value) applies to U.S. population only. Total stock abundance (including animals in Canada) is approximately 451,600.

Description of Mitigation, Monitoring and Reporting Measures

The required mitigation, monitoring, and reporting measures are identical to those included in the **Federal Register** notice announcing the final 2022 IHA and the discussion of the least practicable adverse impact included in that document remains accurate. The measures are found below.

Vineyard Northeast must also abide by all the marine mammal relevant conditions in the NOAA Fisheries GARFO programmatic consultation (specifically Project Design Criteria (PDC) 4, 5, and 7) regarding geophysical surveys along the U.S. Atlantic coast in the three Atlantic Renewable Energy Regions (NOAA GARFO, 2021; <https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-take-reporting-programmatics-greater-atlantic#offshore-wind-site-assessment-and-site-characterization-activities-programmatic-consultation>), pursuant to Section 7 of the Endangered Species Act.

Additionally, on August 1, 2022, NMFS announced proposed changes to the existing NARW vessel speed regulations to further reduce the likelihood of mortalities and serious injuries to endangered NARWs from vessel collisions, which are a leading cause of the species' decline and a primary factor in an ongoing Unusual Mortality Event (87 FR 46921). Should a final vessel speed rule be issued and become effective during the effective period of this IHA (or any other MMPA incidental take authorization), the authorization holder would be required to comply with any and all applicable requirements contained within the final rule. Specifically, where measures in any final vessel speed rule are more protective or restrictive than those in this or any other MMPA authorization, authorization holders would be required to comply with the requirements of the rule. Alternatively, where measures in this or any other MMPA authorization are

more restrictive or protective than those in any final vessel speed rule, the measures in the MMPA authorization must be followed. The responsibility to comply with the applicable requirements of any vessel speed rule would become effective immediately upon the effective date of any final vessel speed rule and, when notice is published of the effective date, NMFS would also notify Vineyard Northeast if the measures in the speed rule were to supersede any of the measures in the MMPA authorization.

Establishment of Shutdown Zones (SZ)—Marine mammal SZs must be established around the HRG survey equipment and monitored by NMFS-approved PSOs as follows:

- 500-m SZ for NARWs during use of specified acoustic sources (impulsive: sparkers and boomers; non-impulsive: non-parametric sub-bottom profilers); and,
- 100-m SZ for all other marine mammals (excluding NARWs) during operation of the sparker and boomer. The only exception for this is for pinnipeds (seals) and small delphinids (*i.e.*, those from the genera *Delphinus*, *Lagenorhynchus*, *Stenella* or *Tursiops*).

If a marine mammal is detected approaching or entering the SZs during the HRG survey, the vessel operator will adhere to the shutdown procedures described below to minimize noise impacts on the animals. During use of acoustic sources with the potential to result in marine mammal harassment (sparkers, boomers, and non-parametric sub-bottom profilers; *i.e.*, anytime the acoustic source is active, including ramp-up), occurrences of marine mammals within the monitoring zone (but outside the SZs) must be communicated to the vessel operator to prepare for potential shutdown of the acoustic source.

Visual Monitoring—Monitoring must be conducted by qualified PSOs who are trained biologists, with minimum qualifications described in the **Federal Register** notices for the 2022 project (87 FR 30872, May 20, 2022; 87 FR 52913, August 30,

2022). Vineyard Northeast must have one PSO on duty during the day and a minimum of two NMFS-approved PSOs must be on duty and conducting visual observations when HRG equipment is in use at night. Visual monitoring must begin no less than 30 minutes prior to ramp-up of HRG equipment and continue until 30 minutes after use of the acoustic source. PSOs must establish and monitor the applicable clearance zones, SZs, and vessel separation distances as described in the 2022 IHA (87 FR 52913, August 30, 2022). PSOs must coordinate to ensure 360-degree visual coverage around the vessel from the most appropriate observation posts, and must conduct observations while free from distractions and in a consistent, systematic, and diligent manner. PSOs are required to estimate distances to observed marine mammals. It is the responsibility of the Lead PSO on duty to communicate the presence of marine mammals as well as to communicate action(s) that are necessary to ensure mitigation and monitoring requirements are implemented as appropriate.

Pre-Start Clearance— Marine mammal clearance zones (CZs) must be established around the HRG survey equipment and monitored by NMFS-approved PSOs prior to use of boomers, sparkers, and non-parametric sub-bottom profilers as follows:

- 500-m CZ for all Endangered Species Act-listed species; and
- 100-m CZ for all other marine mammals.

Prior to initiating HRG survey activities, Vineyard Northeast must implement a 30-minute pre-start clearance period. The operator must notify a designated PSO of the planned start of ramp-up where the notification time should not be less than 60 minutes prior to the planned ramp-up to allow the PSOs to monitor the CZs for 30 minutes prior to the initiation of ramp-up. Prior to ramp-up beginning, Vineyard Northeast must receive confirmation from the PSO that the CZs are clear prior to preceding. Any PSO on duty has the authority to delay the start of survey operations if a marine mammal is detected within the applicable pre-start clearance zones.

During this 30-minute period, the entire CZ must be visible. The exception to this would be in situations where ramp-up must occur during periods of poor visibility (inclusive of nighttime) as long as appropriate visual monitoring has occurred with no detections of marine mammals in 30 minutes prior to the beginning of ramp-up.

If a marine mammal is observed within the relevant CZs during the pre-start clearance period, initiation of HRG survey equipment must not begin until the animal(s) has been observed exiting the respective CZ, or, until an additional period has elapsed with no further sighting (*i.e.*, minimum 15 minutes for small odontocetes and seals; 30 minutes for all other species). The pre-start clearance requirement includes small delphinids. PSOs must also continue to monitor the zone for 30 minutes after survey equipment is shut down or survey activity has concluded.

Ramp-Up of Survey Equipment— When technically feasible, a ramp-up procedure must be used for geophysical survey equipment capable of adjusting energy levels at the start or re-start of survey activities. The ramp-up procedure must be used at the beginning of HRG survey activities in order to provide additional protection to marine mammals near the project area by allowing them to detect the presence of the survey and vacate the area prior to the commencement of survey equipment operation at full power. Ramp-up of the survey equipment must not begin until the relevant SZs have been cleared by the PSOs, as described above. HRG equipment operators must ramp up acoustic sources to half power for 5 minutes and then proceed to full power. If any marine mammals are detected within the SZs prior to or during ramp-up, the HRG equipment must be shut down (as described below).

Shutdown Procedures—If an HRG source is active and a marine mammal is observed within or entering a relevant SZ (as described above), an immediate shutdown of the HRG survey equipment is required. When shutdown is called for by a PSO, the acoustic source must be immediately deactivated and any dispute resolved only following

deactivation. Any PSO on duty has the authority to delay the start of survey operations or to call for shutdown of the acoustic source if a marine mammal is detected within the applicable SZ. The vessel operator must establish and maintain clear lines of communication directly between PSOs on duty and crew controlling the HRG source(s) to ensure that shutdown commands are conveyed swiftly while allowing PSOs to maintain watch. Subsequent restart of the HRG equipment may only occur after the marine mammal has been observed exiting the relevant SZ, or, until an additional period has elapsed with no further sighting of the animal within the relevant SZ.

Upon implementation of shutdown, the HRG source may be reactivated after the marine mammal that triggered the shutdown has been observed exiting the applicable SZ or, following a clearance period of 15 minutes for small odontocetes (*i.e.*, harbor porpoise) and 30 minutes for all other species with no further observation of the marine mammal(s) within the relevant SZ. If the HRG equipment is shut down for brief periods (*i.e.*, less than 30 minutes) for reasons other than mitigation (*e.g.*, mechanical or electronic failure) the equipment may be reactivated as soon as is practicable at full operational level, without 30 minutes of pre-clearance, only if PSOs have maintained constant visual observation during the shutdown and no visual detections of marine mammals occurred within the applicable SZs during that time. For a shutdown of 30 minutes or longer, or if visual observation was not continued diligently during the pause, pre-clearance observation is required, as described above.

The shutdown requirement is waived for pinnipeds (seals) and certain genera of small delphinids (*i.e.*, *Delphinus*, *Lagenorhynchus*, *Stenella*, or *Tursiops*) under certain circumstances. If a delphinid(s) from these genera is visually detected within the SZ, shutdown will not be required. If there is uncertainty regarding identification of a marine mammal species (*i.e.*, whether the observed marine mammal(s) belongs to one of the delphinid genera for which shutdown is waived), PSOs must use best professional

judgment in making the decision to call for a shutdown.

If a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized number of takes have been met, approaches or is observed within the area encompassing the Level B harassment isopleth (178 m), shutdown must occur.

Vessel Strike Avoidance—Vineyard Northeast must comply with vessel strike avoidance measures as described in the **Federal Register** notice for the 2022 IHA (87 FR 52913, August 30, 2022). This includes speed restrictions (10 kn (18.5 km/hour) or less) when mother/calf pairs, pods, or large assemblages of cetaceans are spotted near a vessel; species-specific vessel separation distances; appropriate vessel actions when a marine mammal is sighted (*e.g.*, avoid excessive speed, remain parallel to animal's course, *etc.*); and monitoring of the NMFS NARW reporting system and WhaleAlert daily.

Throughout all phases of the survey activities, Vineyard Northeast must monitor NOAA Fisheries NARW reporting systems for the establishment of a dynamic management area (DMA). If NMFS establishes a DMA in the surrounding area, including the project area or export cable routes being surveyed, Vineyard Northeast is required to abide by the 10-kn (5.14 m/s) speed restriction.

Training—Project-specific training is required for all vessel crew prior to the start of survey activities.

Reporting—PSOs must record specific information as described in the **Federal Register** notice of the issuance of the 2022 IHA (87 FR 52913, August 30, 2022). Within 90 days after completion of survey activities, Vineyard Northeast must provide NMFS with a monitoring report, which must include summaries of recorded takes and estimates of the number of marine mammals that may have been harassed.

In the event of a ship strike or discovery of an injured or dead marine mammal, Vineyard Northeast must report the incident to the Office of Protected Resources (OPR),

NMFS and to the New England/Mid-Atlantic Regional Stranding Coordinator as soon as feasible. The report must include the information listed in the **Federal Register** notice of the issuance of the initial IHA (87 FR 52913, August 30, 2022).

Determinations

Vineyard Northeast's HRG survey activities are a subset but otherwise unchanged from those analyzed in support of the 2022 IHA. The effects of the activity, taking into consideration the mitigation and related monitoring measures, remain unchanged from those evaluated in support of the 2022 IHA, regardless of the minor increase in estimated take for one species (minke whale). NMFS expects that all potential takes will be short-term Level B behavioral harassment in the form of temporary avoidance of the area or decreased foraging, reactions that are considered to be of low severity and with no lasting biological consequences (*e.g.*, Southall *et al.*, 2007). In addition to being temporary, the maximum harassment zone around a survey vessel is 178 m from use of the Applied Acoustics AA251 Boomer. Although this distance is assumed for all survey activity evaluated here and in estimating take numbers authorized, in reality, much of the survey activity will involve use of acoustic sources with a reduced acoustic harassment zone (4 m for the Edge Tech Chirp 216 or 141 m for the GeoMarine Geo Spark 2000), producing expected effects of particularly low severity. Therefore, the ensonified area surrounding each vessel is relatively small compared to the overall distribution of the animals in the area and the available habitat.

The survey area overlaps or is in close proximity to feeding BIAs for NARWs (Cape Cod Bay and Massachusetts Bay BIA, February-April/Great South Channel and Georges Bank Shelf Break BIA, April-June), humpback whales (March-December), fin whales (year-round/March-October), sei whales (May-November), and minke whales (March-November), as well as overlaps the migratory BIA for NARWs (November 1-April 30) (LaBrecque *et al.*, 2015). In addition, the survey area overlaps with the area

south of Martha's Vineyard and Nantucket, referred to as "South of the Islands," which has been identified as relatively new year-round core NARW foraging habitat (Oleson *et al.*, 2020; Quintana-Rizzo *et al.*, 2021). As prey species are mobile and broadly distributed throughout the survey area, marine mammals that are temporarily displaced during survey activities are expected to be able to resume foraging once they have moved away from areas with disturbing levels of underwater noise, thus we do not expect biologically significant impacts to feeding behavior. In addition, most of these feeding BIAs are extensive and sufficiently large (*e.g.*, 3,149 km² and 12,247 km² for NARWs; 47,701 km² for humpback whales; 18,015 km² and 2,933 km² for fin whales; 56,609 km² for sei whales; 54,341 km² for minke whales), and the acoustic footprint of the survey is sufficiently small that feeding opportunities for these species will not be reduced appreciably. Due to the temporary nature of the disturbance and the availability of similar habitat and resources in the surrounding area, the impacts to marine mammals and the food sources that they utilize are not expected to cause significant or long-term consequences for individual marine mammals or their populations. Even considering the increased estimated take for one species (minke whales), the impacts of these lower severity exposures are not expected to accrue to a degree that the fitness of any individuals will be impacted and, therefore, no impacts on the annual rates of recruitment or survival will result.

As previously discussed in the 2022 IHA (87 FR 52913, August 30, 2022), impacts from the survey are expected to be localized to the specific area of activity and only during periods when Vineyard Northeast's acoustic sources are active. There are no rookeries, mating or calving grounds known to be biologically important to marine mammals within the survey area.

As noted for the 2022 IHA (87 FR 52913, August 30, 2022), the survey area overlaps a migratory corridor BIA and migratory route SMAs (Port of New Jersey/New

York and Block Island) for NARWs. As the survey activities will be temporary and the spatial acoustic footprint produced by the survey will be very small relative to the spatial extent of the available migratory habitat in the BIA (269,448 km²), NMFS does not expect NARW migration to be impacted by the survey. Required vessel strike avoidance measures will also decrease risk of ship strike during migration; no ship strike is expected to occur during Vineyard Northeast's planned activities. Vineyard Northeast will be required to comply with seasonal speed restrictions of these SMAs, and in any DMA, should NMFS establish one (or more) in the survey area. Additionally, Vineyard Northeast requested and NMFS has authorized only 12 takes by Level B harassment of NARWs. This amount is less than the 40 Level B harassment takes authorized in the 2022 IHA due to the updated Duke University density data (Roberts *et al.*, 2023) and reduced survey area.

Although take by Level B harassment of NARWs has been authorized by NMFS, we anticipate a very low level of harassment, should it occur at all, because Vineyard Northeast is required to maintain a shutdown zone of 500 m if a NARW is observed. The takes that are authorized account for any missed animals wherein the survey equipment is not shut down immediately. As shutdown will be called for immediately upon detection (if the whale is within 500 m), it is likely the exposure time will be very limited and received levels will not be much above the harassment threshold. Further, the 500-m shutdown zone for right whales is conservative, considering the distance to the Level B harassment isopleth for the most impactful acoustic source (*i.e.*, Applied Acoustics AA251 Boomer—which may not be used on all survey days) is estimated to be 178 m, and thereby minimizes the potential for behavioral harassment of this species. As noted previously, Level A harassment is not expected due to the small PTS zones associated with HRG equipment types planned for use. NMFS does not anticipate NARW takes that

will result from Vineyard Northeast's activities will impact annual rates of recruitment or survival. Thus, any takes that occur will not result in population level impacts.

We also note that our findings for other species with active UMEs that were previously described for the 2022 IHA (87 FR 52913, August 30, 2022) remain applicable to this project. In addition, our analysis of survey effects on species with BIAs that overlap with the survey area remains unchanged. Therefore, in conclusion, there is no new information suggesting that our analysis or findings should change.

Based on the information contained here and in the referenced documents, NMFS has determined the following: (1) the required mitigation measures will effect the least practicable impact on marine mammal species or stocks and their habitat; (2) the authorized takes will have a negligible impact on the affected marine mammal species or stocks; (3) the authorized takes represent small numbers of marine mammals relative to the affected stock abundances; (4) Vineyard Northeast's activities will not have an unmitigable adverse impact on taking for subsistence purposes as no relevant subsistence uses of marine mammals are implicated by this action, and (5) appropriate monitoring and reporting requirements are included.

Endangered Species Act

Section 7(a)(2) of the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 *et seq.*) requires that each Federal agency insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. To ensure ESA compliance for the issuance of IHAs, NMFS OPR consults internally whenever we propose to authorize take for endangered or threatened species.

NMFS has authorized the incidental take of five species of marine mammals which are listed under the ESA, including the North Atlantic right, fin, sei, blue, and

sperm whale, and has determined that this activity falls within the scope of activities analyzed in NMFS GARFO's programmatic consultation regarding geophysical surveys along the U.S. Atlantic coast in the three Atlantic Renewable Energy Regions (completed June 29, 2021; revised September 2021).

National Environmental Policy Act

To comply with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. 4321 *et seq.*) and NOAA Administrative Order (NAO) 216-6A, NMFS must review our proposed action (*i.e.*, the issuance of an IHA) with respect to potential impacts on the human environment. This action is consistent with categories of activities identified in Categorical Exclusion B4 (IHAs with no anticipated serious injury or mortality) of the Companion Manual for NOAA Administrative Order 216-6A, which do not individually or cumulatively have the potential for significant impacts on the quality of the human environment and for which we have not identified any extraordinary circumstances that would preclude this categorical exclusion. Accordingly, NMFS has determined that the issuance of the IHA qualifies to be categorically excluded from further NEPA review.

Authorization

NMFS has issued an IHA to Vineyard Northeast for the potential harassment of small numbers of 19 marine mammal species incidental to marine site characterization surveys offshore of Massachusetts to southern New Jersey provided the previously mentioned mitigation, monitoring, and reporting requirements are followed.

Dated: July 27, 2023.

Kimberly Damon-Randall,

Director, Office of Protected Resources,

National Marine Fisheries Service.

[FR Doc. 2023-16292 Filed: 7/31/2023 8:45 am; Publication Date: 8/1/2023]